

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently amended) A chimeric polypeptide, said chimeric polypeptide comprising:
 - a) a first domain ~~comprising~~ consisting essentially of an third intracellular loop (i3 loop) or a fragment thereof ~~portion~~ of a G protein coupled receptor (GPCR), and
 - b) ~~at least~~ a second domain, attached to the first domain, wherein said second domain is a naturally or non-naturally occurring cell-penetrating, membrane-tethering hydrophobic moiety

wherein said first domain does not comprise a native extracellular portion of said GPCR and wherein said chimeric polypeptide binds to its cognate GPCR.
2. (currently amended) The chimeric polypeptide of claim 1, wherein said ~~second or more domains are~~ hydrophobic moiety is attached at ~~either one end, at both ends, or at an internal position~~ the N-terminal end, the C-terminal end, or both the N-terminal and C-terminal ends of said first domain.
3. (previously amended) The chimeric polypeptide of claim 1, wherein said hydrophobic moiety is a lipid.
4. (amended herein) The chimeric polypeptide of claim 3, wherein said hydrophobic moiety is selected from the group consisting of: capryloyl (C₈); nonanoyl (C₉); capryl (C₁₀); undecanoyl (C₁₁); lauroyl (C₁₂); tridecanoyl (C₁₃); myristoyl (C₁₄); pentadecanoyl (C₁₅); palmitoyl (C₁₆); phtanoyl ((CH₃)₄); heptadecanoyl (C₁₇); and stearoyl (C₁₈). ~~stearoyl (C₁₈), palmitoyl (C₁₆), myristoyl (C₁₄), lauryl (C₁₂), capryl (C₁₀), and capryloyl (C₈)~~ wherein said hydrophobic moiety is attached to said chimeric polypeptide with amide bonds, sulphydryls, amines, alcohols, phenolic groups, or carbon-carbon bonds.
5. Cancelled.
6. - 9. Cancelled.
10. (currently amended) The chimeric polypeptide of claim ~~6~~ 1, where said ~~intracellular portion is i3 loop or fragment thereof comprises~~ at least 3 contiguous amino acid residues of the third intracellular loop.

11. (currently amended) The chimeric polypeptide of claim ~~6~~ 1, wherein said ~~intracellular portion is i3 loop or fragment thereof~~ comprises at least 5 contiguous amino acid residues of the third intracellular loop.
12. (canceled)
13. (currently amended) The chimeric polypeptide of claim ~~12~~ 1, wherein said ~~intracellular portion i3 loop or fragment thereof~~ comprises at least 7 contiguous amino acid residues of the third intracellular loop.
14. (Currently amended) The chimeric polypeptide of claim 1, wherein said first domain comprises a protease-activated receptor (PAR) and said second domain comprises a lipid moiety.
15. Cancelled.
16. Cancelled.
17. Cancelled.
18. Cancelled.
19. (amended herein) The chimeric polypeptide of claim 1, wherein the G-protein coupled receptor or fragment thereof, is selected from the group consisting of a luteinizing hormone receptor, a follicle stimulating hormone receptor, a thyroid stimulating hormone receptor, a calcitonin receptor, a glucagon receptor, a glucagon-like peptide 1 receptor (GLP-1), a metabotropic glutamate receptor, a parathyroid hormone receptor, a vasoactive intestinal peptide receptor, a secretin receptor, a growth hormone releasing factor (GRF) receptor, protease-activated receptors (PARs), cholecystokinin receptors, somatostatin receptors, melanocortin receptors, ADP receptors, adenosine receptors, thromboxane receptors, platelet activating factor receptor, adrenergic receptors, 5-HT receptors, CXCR4, CCR5, chemokine receptors, neuropeptide receptors, opioid receptors, ~~erythropoietin receptor, von Willebrand receptor,~~ parathyroid hormone (PTH) receptor, and vasoactive intestinal peptide (VIP) receptor, ~~and collagen receptors.~~
20. – 28. Cancelled.
29. (Original) A pharmaceutical composition comprising the chimeric polypeptide of claim 1 and a pharmaceutically acceptable carrier.

30. Cancelled.
31. (Original) A kit comprising in one or more containers, the pharmaceutical composition of claim 29.
- 32.- 34. Cancelled.
35. (Previously added) The chimeric polypeptide of claim 1, wherein said G-protein coupled receptor is a mammalian G-protein coupled receptor.
36. (Previously added) The chimeric polypeptide of claim 4, wherein said hydrophobic moiety is palmitoyl.
37. (Previously added) The chimeric polypeptide of claim ~~19~~ 1, wherein said G-protein coupled receptor is a protease-activated receptor (PAR).
38. (Previously added) The chimeric polypeptide of claim 37, wherein the protease-activated receptor is selected from the group consisting of PAR1, PAR2, and PAR4.
39. (Previously added) The chimeric polypeptide of claim ~~12~~ 1, wherein said ~~intracellular portion~~ i3 loop or fragment thereof comprises a sequence selected from the group consisting of SEQ ID NO: 1-16, 19-23, and 29.
40. (currently amended) The chimeric polypeptide of claim ~~12~~ 1, wherein said ~~intracellular portion~~ i3 loop or fragment thereof comprises a sequence selected from the group consisting of SEQ ID NO: 1-10, and 23.
41. (Previously added) The chimeric polypeptide of claim 1, wherein the said G-protein coupled receptor is selected from the group consisting of CCKA, CCKB, SSTR2, and SubP receptors.
42. (Previously added) The chimeric polypeptide of claim 3, wherein said hydrophobic moiety is a steroid.
43. (currently amended) A chimeric polypeptide, said chimeric polypeptide comprising:
a) a first domain comprising an ~~intracellular portion~~ isolated i3 loop or fragment thereof of a protease-activated receptor (PAR), and
b) a second domain, attached to the first domain, wherein said second domain is palmitate.

44. (new) The chimeric polypeptide of claim 1, wherein said hydrophobic moiety is selected from the group consisting of a phospholipid, a steroid, a sphingosine, a ceramide, an octyl-glycine, a 2-cyclohexylalanine, and a benzoylphenylalanine.
45. (new) The chimeric polypeptide of claim 1, further comprising a third domain, said third domain being a cell-penetrating, membrane tethering hydrophobic moiety attached to said first domain.
46. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:1.
47. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:2.
48. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:3.
49. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:4.
50. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:5.
51. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:6.
52. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:7.
53. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:8.
54. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:9.
55. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:10.
56. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:11.

57. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:12.
58. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:13.
59. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:14.
60. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:15.
61. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:16.
62. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:19.
63. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:20.
64. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:21.
65. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:22.
66. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:23.
67. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:28.
68. (new) The chimeric polypeptide of claim 1, wherein said i3 loop or fragment thereof comprises the amino acid sequence of SEQ ID NO:29.
69. (new) The chimeric polypeptide of claim 1, wherein the hydrophobic moiety is a steroid.